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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,009	07/25/2001	Janne Linkola	2132-49PCON	5161

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EXAMINER

PEREZ GUTIERREZ, RAFAEL

ART UNIT	PAPER NUMBER
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2686

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/915,009

Applicant(s)

Linkola

Examiner

Rafael Perez-Gutierrez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-8 and 13-16 is/are allowed.
- 6) ☒ Claim(s) 1-4 and 9-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 October 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This Action is in response to Applicant's amendment filed on October 29, 2004. **Claims 1-16** are still pending in the present application. **This Action is made NON-FINAL.**

Response to Arguments

2. Applicant's arguments and accompanying documents (i.e., certified copy and certified translation of Finnish priority application No. 990135, declaration certifying copendency of international application, and copy of Demand in International Application No. PCT/FI00/00046) filed October 29, 2004, with respect to the rejections of **claims 1-16** under 35 USC § 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground of rejection is made in view of the newly discovered reference to **Sawyer et al. (U.S. Patent # 5,946,629)**.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

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4. **Figures 1a and 1b** should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

5. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office Action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended”. If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the Examiner, the Applicant will be notified and informed of any required corrective action in the next Office Action. If a response to the present Office Action fails to include proper drawing corrections, corrected drawings or arguments therefor, the response can be held **NON-RESPONSIVE** and/or the application could be **ABANDONED** since the objections/corrections to the drawings are no longer held in abeyance.

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Claim Objections

6. **Claim 12** is objected to because of the following minor informality: On **lines 2 and 3**, replace “predetermined short message destination number” with --predetermined destination number of the short message-- in order to provide consistency in the language that was previously recited in **claim 9**. Appropriate correction is required.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. **Claims 1-4 and 9-12** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Applicant's admission of prior art** in view of **Sawyer et al. (U.S. Patent # 5,946,629)**.

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Consider **claims 1-3**, the preamble of claim 1 is considered admitted prior art because claim 1 is a Jepson-type claim (see MPEP 2129), therefore, Applicant's admission of prior art discloses in a method for routing a short a message into a data network in a telecommunication system that includes a mobile communication network to which the data network is connected, a telecommunication terminal connected to the mobile communication network, and a first short message service center connected to the mobile communication network and defined in the telecommunication terminal for use by the telecommunication terminal in connection with short messaging, and wherein a short message addressed to a predetermined destination number is routed from the telecommunication terminal to the first short message service center, a mobile switching center in a numerical range of the mobile communication network is determined from the predetermined destination number of the addressed short message, and the short message is routed in Mobile Terminated format from the first short message service center to the predetermined destination number.

However, Applicant's admission of prior art fails to disclose the steps of:

routing the short message from the first short message service center to a converter component based on the predetermined destination number which refers to the converter component and which is in the numerical range of the mobile communication network; and

routing the short message from the converter component into the data network,

wherein the converter component is disposed at a network address corresponding to the mobile switching center (claim 2) and

wherein the data network is connected to the converter component (claim 3).

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In the same field of endeavor, Sawyer et al. clearly show and disclose a method for routing a short message into a data network 20(2), 20(3) 122, 132 (figures 1 and 3) including the steps of:

routing the short message from a short message service center (MC) 22 (first short message service center) (figure 1) to an inter-network communications functionality (ICF) 28 (converter component) (figure 1) based on a destination identifier/number (predetermined destination number) which refers to the ICF 28 (converter component) (figure 1) and which is in the numerical range of the mobile communication network (i.e., destination number corresponds to the numbering scheme used in the network) (abstract, figures 1, 2C, 2D, and 3, column 2 lines 6-19 and 27-41, column 3 lines 47-61, column 4 lines 3-9, column 4 line 48 - column 5 line 5, and column 5 line 21 - column 6 line 43); and

routing the short message from the ICF 28 (converter component) (figure 1) into the data network 20(2), 20(3) 122, 132 (abstract, figures 1, 2C, 2D, and 3, column 2 lines 6-19 and 27-41, column 3 lines 47-61, column 4 lines 3-9, column 4 line 48 - column 5 line 5, and column 5 line 21 - column 6 line 43),

wherein the ICF 28 (converter component) is disposed at a network address corresponding to a mobile switching center (MSC) 18 (figure 1 and column 3 lines 26-28 and 47-52), and

wherein the data network 20(2), 20(3) 122, 132 is connected to the ICF 28 (converter component) (figure 1 and column 3 lines 47-61).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time

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the invention was made to incorporate the step of routing the short message to an ICF 28 (converter component) as taught by Sawyer et al. into Applicant's admission of prior art in order to provide seamless routing of short messages between subscribers of disparate networks by converting the short messages in the ICF 28 (converter component).

Consider **claim 4**, and **as applied to claim 1 above**, Applicant's admission of prior art, as modified by Allison et al. above, fails to specifically disclose the further step of converting, in the converter component, the predetermined destination number of the short message into a second destination number that refers to the data network.

Nonetheless, Sawyer et al. further disclose that step of converting, in the ICF 28 (converter component) (figure 1), the destination identifier/number (predetermined destination number) of the short message to an address of the destination (second destination number) that refers to the data network 20(2), 20(3) 122, 132 (i.e., all short messages are routed to the ICF 28 where the destination address in the data network is determined) (column 5 lines 1-5).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to further incorporate the step of converting, in the ICF 28 (converter component), the destination identifier/number (predetermined destination number) of the short message to an address of destination (second destination number) that refers to data network as taught by Sawyer et al. into Applicant's admission of prior art in order to provide seamless routing of short messages between subscribers of disparate networks by converting the short messages in the ICF 28 (converter component).

Consider **claims 9-11**, the preamble of claim 9 is considered admitted prior art because

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claim 9 is a Jepson-type claim (see MPEP 2129), therefore, Applicant's admission of prior art discloses in a system for routing a short a message into a data network in a telecommunication system that includes a mobile communication network to which the data network is connected, a telecommunication terminal connected to the mobile communication network, and a first short message service center connected to the mobile communication network and defined in the telecommunication terminal for use by the telecommunication terminal in connection with short messaging, and wherein a short message addressed to a predetermined destination number is routed from the telecommunication terminal to the first short message service center, a mobile switching center in a numerical range of the mobile communication network is determined from the predetermined destination number of the addressed short message, and the short message is routed in Mobile Terminated format from the first short message service center to the predetermined destination number.

However, Applicant's admission of prior art fails to disclose:

a converter component connected to the mobile communication network and referred to by a destination number in the numerical range of the mobile communication network;

means for routing the short message from the first short message service center to the converter component based on the predetermined destination number which refers to the converter component; and

means for routing the short message from the converter component into the data network, wherein the converter component is located at a network address corresponding to the mobile switching center (claim 10) and

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wherein the data network is connected to the converter component (claim 11).

In the same field of endeavor, Sawyer et al. clearly show and disclose a system for routing a short message into a data network 20(2), 20(3) 122, 132 (figures 1 and 3) including:

an inter-network communications functionality (ICF) 28 (converter component) (figure 1) connected to the mobile communication network and referred to by a destination identifier/number (destination number) in the numerical range of the mobile communication network (i.e., destination number corresponds to the numbering scheme used in the network) (abstract, figures 1, 2C, 2D, and 3, column 2 lines 6-19 and 27-41, column 3 lines 47-61, column 4 lines 3-9, column 4 line 48 - column 5 line 5, and column 5 line 21 - column 6 line 43); and

means for routing (figure 1) for routing the short message from a short message service center (MC) 22 (first short message service center) (figure 1) to the ICF 28 (figure 1) based on the destination identifier/number (predetermined destination number) which refers to the ICF 28 (converter component) and for routing the short message from the ICF 28 (converter component) (figure 1) into the data network 20(2), 20(3) 122, 132 (abstract, figures 1, 2C, 2D, and 3, column 2 lines 6-19 and 27-41, column 3 lines 47-61, column 4 lines 3-9, column 4 line 48 - column 5 line 5, and column 5 line 21 - column 6 line 43),

wherein the ICF 28 (converter component) is disposed at a network address corresponding to a mobile switching center (MSC) 18 (figure 1 and column 3 lines 26-28 and 47-52), and

wherein the data network 20(2), 20(3) 122, 132 is connected to the ICF 28 (converter component) (figure 1 and column 3 lines 47-61).

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Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the ICF 28 (converter component) taught by Sawyer et al. into Applicant's admission of prior art in order to provide seamless routing of short messages between mobile subscribers of disparate networks by converting the short messages in the ICF 28 (converter component).

Consider **claim 12**, and **as applied to claim 9 above**, Applicant's admission of prior art, as modified by Sawyer et al. above, fails to specifically disclose that the converter component comprises means for converting the predetermined destination number of the short message into a second destination number that refers to the data network.

Nonetheless, Sawyer et al. further disclose means for converting (not shown), in the ICF 28 (converter component) (figure 1), the destination identifier/number (predetermined destination number) of the short message to an address of the destination (second destination number) that refers to the data network 20(2), 20(3) 122, 132 (i.e., all short messages are routed to the ICF 28 where the destination address in the data network is determined) (column 5 lines 1-5).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to further incorporate the means for converting, in the ICF 28 (converter component), the destination identifier/number (predetermined destination number) of the short message to an address of destination (second destination number) that refers to data network as taught by Sawyer et al. into Applicant's admission of prior art in order to provide seamless routing of short messages between subscribers of disparate networks by converting the short

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messages in the ICF 28 (converter component).

Allowable Subject Matter

9. **Claims 5-8 and 13-16** are allowed.

10. The following is an Examiner's statement of reasons for allowance:

Consider **claims 5 and 13**, the best prior art found during the examination of the present application, **Sawyer et al. (U.S. Patent # 5,946,629)**, fails to specifically disclose, teach, or suggest means for converting, in the converting component, the Mobile Terminated format short message into a Mobile Originated format short message. While Sawyer et al. do disclose conversion of short messages, they fail to specify converting from Terminated to Originated format. Therefore, this feature is considered novel and non-obvious over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

11. Any response to this Office Action should be **faxed to (703) 872-9306 or mailed to:**

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

12. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Rafael Perez-Gutierrez whose telephone number is (571) 272-7915. The Examiner can normally be reached on Monday-Thursday from 6:30am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding

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should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

A handwritten signature in black ink, appearing to read 'Rafael Perez-Gutierrez', with a stylized, cursive script.

Rafael Perez-Gutierrez

R.P.G./rpg **RAFAEL PEREZ-GUTIERREZ**
PATENT EXAMINER

May 12, 2005